

SUBMISSION UNDER MPEP 609 D Page 1 of 3	Application Number	Not Assigned
	Filing Date	10 December 2001
	First Named Inventor	DARROW
	Group Art Unit	Not Assigned
	Examiner Name	Not Assigned
	Attorney Docket Number	ORT-1552

10997 U.S. PTO
10/015989



U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Name of Patentee or Applicant of Cited Document	U.S. Patent Document		Class/Subclass Pages, Columns, Lines, where relevant passages or relevant figures appear
			Number	Kind Code ² (if known)	
		Bang et al.	US 4,992,373		
		Bang et al.	US 5,196,322		
		Forster et al.	US 5,200,340		
		Van Eekelen et al.	US 5,217,878		
		Gerlitz et al.	US 5,270,178		
		Samal et al.	US 5,278,062		
		Berg et al.	US 5,326,700		
		Mosher et al.	US 5,342,762		
		Lavallie, Edward R.	US 5,665,566		
		Comb et al.	US 5,834,247		

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Examiner Initials	Cite No. ¹	Name of Patentee or Applicant of Cited Document	Foreign Patent Document			Pages, Columns, Lines, where relevant passages or relevant figures appear	T ⁶
			Office ³	Number ⁴	Kind Code ⁵		
		SmithKline Beecham PLC	PCT	EP 0887414			
		Boehringer Mannheim GmbH	PCT	WO 97/47737			
		Symbiosis Genetics, Inc.	PCT	WO 98/49326			

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		Altschul et al., (1990) Basic Local Alignment.	
		I. Ausubel and M. Frederick, "Short Protocols in Molecular Biology", Molecular biology-Laboratory Manuals (1997).	
		Chen et al., "Expression and Activity-Dependent Changes of a Novel Limbic-Serine Protease Gene in the Hippocampus", J. Neurosci. (1995) 15: 5088-5097.	
		Davis et al., "The Coagulation Cascade: Initiation, Maintenance, and Regulation.", Biochemistry (1991) 30:10363-10370	
		Hansson et al., "Cloning, Expression, and Characterization of Stratum Corneum Chymotryptic Enzyme: A Skin-Specific Human Serine Proteinase", J. Biol. Chem. (1994) 269:19420-19426.	
		R. Huber and W. Bode, "Structural Basis of the Activation and Action of Trypsin", Acc. Chem. Res. (1978) 11:114-122.	
		Inoue et al., "Cloning and Tissue Distribution of a Novel Serine Protease Esp-1 from Human Eosinophils", Biochem. Biophys. Res. Commun. (1998) 252:307-312.	

Examiner Signature	<i>William W. Moore</i>	Date Considered	<i>3 March 2005</i>
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WDM		Ishii et al., "Kinetics of Thrombin Receptor Cleavage on Intact Cells. Relation to Signaling", <i>J. Biol. Chem.</i> (1993) 268:9780-9786.	
WDM		Kossiakoff et al., "Structure of Bovine Trypsinogen at 1.9 .ang. Resolution", <i>Biochemistry</i> (1977) 16:654-664.	
WDM	✓	S. Kühn and P. F. Zipfel, "The Baculovirus Expression Vector pBSV-8His Directs Secretion of Histidine-Tagged Proteins", <i>Gene</i> (1995) 12:225-229.	
WDM		J. Kyte and R. F. Doolittle, "A Simple Method for Displaying the Hydrophatic Character of a Protein", <i>J. Mol. Biol.</i> (1982) 157:105-132.	
WDM		Leytus et al., "A Novel Trypsin-Like Serine Protease (Hepsin) with a Putative Transmembrane Domain Expressed by Human Liver and Hepatoma Cells", <i>Biochemistry</i> (1988) 27:1067-1074.	
WDM		Little et al., "Zyme, A Novel and Potentially Amyloidogenic Enzyme cDNA Isolated from Alzheimer's Disease Brain", <i>J. Biol. Chem.</i> (1997) 272:25135-25142.	
WDM		B. Martoglio and R. Dobberstein, "Signal Sequences: More Than Just Greasy Peptides", <i>Trends Cell Biol.</i> (1998) 8:410-415.	
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WDM	✓	Nelson et al., "Molecular Cloning and Characterization of Prostase, An Androgen-Regulated Serine Protease with Prostate-Restricted Expression", <i>P. N. A. S. USA</i> (1999) 96:3114-3119.	
WDM		W. R. Pearson and D. J. Lipman, "Improved Tools for Biological Sequence Comparison", <i>P. N. A. S. USA</i> (1988) 85:2444-2448.	
WDM		Pham et al., "Production of Fully Active Recombinant Murine Granzymen B in Yeast", <i>J. Biol. Chem.</i> (1988) 273(3):1629-1698.	
WDM		D. Proud and A. P. Kaplan, "Kinin Formation: Mechanisms and Role in Inflammatory Disorders", <i>Ann. Rev. Immunol.</i> (1988) 6:49-83.	
WDM		N. D. Rawlings and A. J. Barrett, "Families of Serine Peptidases", <i>Methods Enzymol.</i> (1994) 244:19-61.	
WDM		K. B. M. Reid and R. R. Porter, "The Proteolytic Activation Systems of Complement", <i>Ann. Rev. Biochem.</i> (1981) 50:433-464.	
		Sambrook et al., <i>Molecular Cloning: A Laboratory Manual</i>, 2nd Ed. (Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. (1989))	
WDM		Sherman et al., "Identification of Tissue-type Plasminogen Activator-specific Plasminogen Activator Inhibitor-1 Mutants", <i>J. Biol. Chem.</i> (1995) 270(16):9301-9306.	
WDM		Stroud et al., "Structure of Bovine Trypsin: Electron Density Maps of the Inhibited Enzyme at 5 .ang. and 2.7 .ang. Resolution", <i>J. Mol. Biol.</i> (1974) 83:185-208.	

Examiner Signature	W. H. W. Moore	Date Considered	3 March 2005
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WJW		K. Tachias and E. L. Madison, "Converting Tissue-Type Plasminogen Activator into a Zymogen", <i>J. Biol. Chem.</i> (1996) 271:28749-28752.	
WJW		Takayama et al., "Characterization of the Precursor of Prostate-Specific Antigen Activation by Trypsin and by Human Glandular Kallikrein", <i>J. Biol. Chem.</i> (1997) 272:21582-21588.	
WJW		Wang et al., "Production of Active Recombinant Human Chymase from a Construct Containing the Enterokinase Cleavage Site of Trypsinogen in Place of the Native Propeptide Sequence", <i>Biol. Chem. Hoppe-Seyler</i> (1995) 376:681-684.	
WJW	✓	Yamashiro et al., "Molecular Cloning of a Novel Trypsin-Like Serine Protease (Neurosin) Preferentially Expressed in Brain", <i>Biochim. Biophys. Acta</i> (1997) 1350:11-14.	
WJW	✓	Yoshida et al., "Sequence Analysis and Expression of Human Neuropsin cDNA and Gene.", <i>Gene</i> (1998) 213:9-16.	
WJW	✓	Yoshida et al., "cDNA Cloning and Expression of a Novel Serine Protease, TLSP1", <i>Biochim. Biophys. Acta</i> (1998) 1399:225-228.	
WJW	✓	Yu et al., "Molecular Cloning: Tissue Specific Expression and Cellular Localization of Human Prostatic mRNAs", <i>J. Bio. Chem.</i> (1995) 270(22): 13483-13489.	
WJW	✓	Yu et al., "Prostatic is a Novel Human Serine Proteinase from Seminal Fluid: Purification, Tissue Distribution and Localization in Prostate Gland", <i>J. Biol. Chem.</i> (1994) 269:18843-8.	

Examiner Signature	<i>William J. W.</i>	Date Considered	5 March 2005
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PTO/SB/08A (08-00)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

Application Number	10/015,989
Filing Date	10 December 2001
First Named Inventor	DARROW
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		Number	Kind Code ² (if known)			
LW		4,992,373		Bang et al.	02-12-1991	435/226
		5,196,322		Bang et al.	03-23-1993	435/69.7
		5,200,340		Forster et al.	04-06-1993	424/94.64
		5,217,878		Van Eekelen et al.	06-08-1993	435/69.1
		5,270,178		Gerlitz et al.	12-14-1993	435/69.1
		5,278,062		Samal et al.	01-11-1994	435/223
		5,326,700		Berg et al.	07-05-1994	435/240
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		5,665,566		Lavallie, Edward R.	09-09-1997	435/69.3
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Examine r Initials	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear	T ³
		Office ³	Number ⁴	Kind Code ⁵				
LW		EP	0887414		SmithKline Beecham PLC	12-30-1998	—	
LW		WO	97/47737		Boehringer Mannheim GmbH	12-18-1997	—	
LW		WO	98/49326		Symbiosis Genetics, Inc.	11-05-1998	—	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials ⁶	Cite No. ¹	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		ALTSCHUL ET AL., (1990) Basic Local Alignment	
		AUSUBEL AND M. FREDERICK, "Short Protocols in Molecular Biology", Molecular Biology Laboratory Manuals (1997).	
LW		CHEN ET AL., "Expression and Activity-Dependent Changes of a Novel Limbic-Serine Protease Gene in the Hippocampus", J. Neurosci. (1995) 15: 5088-5097.	
LW		DAVIE ET AL., "The Coagulation Cascade: Initiation, Maintenance, and Regulation.", Biochemistry (1991) 30:10363-10370	

Examiner Signature	<i>William W. Moore</i>	Date Considered	3 March 2005
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 2

Application Number	10/015,989
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Wm		HANSSON ET AL., "Cloning, Expression, and Characterization of Stratum Corneum Chymotryptic Enzyme: A Skin-Specific Human Serine Proteinase", <i>J. Biol. Chem.</i> (1994) 269:19420-19426.	
Wm		R. HUBER AND W. BODE, "Structural Basis of the Activation and Action of Trypsin", <i>Acc. Chem. Res.</i> (1978) 11:114-122.	
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Wm		J. KYTE AND R. F. DOOLITTLE, "A Simple Method for Displaying the Hydropathic Character of a Protein", <i>J. Mol. Biol.</i> (1982) 157:105-132.	
		LEYTUS ET AL., "A Novel Trypsin-Like Serine Protease (Hepsin) with a Putative Transmembrane Domain Expressed by Human Liver and Hepatoma Cells", <i>Biochemistry</i> (1988) 27:1067-1074.	
		LITTLE ET AL., "Zyme, A Novel and Potentially Amyloidogenic Enzyme cDNA Isolated from Alzheimer's Disease Brain", <i>J. Biol. Chem.</i> (1997) 272:25135-25142.	
		B. MARTOGLIO AND R. DOBBERSTEIN, "Signal Sequences: More Than Just Greasy Peptides", <i>Trends Cell Biol.</i> (1998) 8:410-415.	
		MATTHEWS ET AL., "Three Dimensional Structure of Trypsin-α-Chymotrypsin", <i>Nature (London)</i> (1967) 214:652-656.	
		NELSON ET AL., "Molecular Cloning and Characterization of Prostate, An Androgen-Regulated Serine Protease with Prostate-Restricted Expression", <i>P. N. A. S. USA</i> (1999) 96:3114-3119.	
		W. R. PEARSON AND D. J. LIPMAN, "Improved Tools for Biological Sequence Comparison", <i>P. N. A. S. USA</i> (1988) 85:2444-2448.	
		PRAM ET AL., "Production of Fully Active Recombinant Murine Granzymes B in Yeast", <i>J. Biol. Chem.</i> (1988) 273(3):1629-1698.	
		D. PROUD AND A. P. KAPLAN, "Kinin Formation: Mechanisms and Role in Inflammatory Disorders", <i>Ann. Rev. Immunol.</i> (1988) 6:49-83.	
		N. D. RAWLINGS AND A. J. BARRETT, "Families of Serine Peptidases", <i>Methods Enzymol.</i> (1994) 244:19-61.	
		K. B. M. REID AND R. R. PORTER, "The Proteolytic Activation Systems of Complement", <i>Ann. Rev. Biochem.</i> (1981) 50:433-464.	
		SAMBROOK ET AL., <i>Molecular Cloning: A Laboratory Manual</i>, 2nd Ed. (Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. (1989)).	
		SHERMAN ET AL., "Identification of Tissue-type Plasminogen Activator specific Plasminogen Activator Inhibitor-1 Mutants", <i>J. Biol. Chem.</i> (1995) 270(16):9301-9306.	
		STROUD ET AL., "Structure of Bovine Trypsin: Electron Density Maps of the Inhibited Enzyme at 5. ang. and 2.7. ang. Resolution", <i>J. Mol. Biol.</i> (1974) 83:185-208.	
		K. TACHIAS AND E. L. MADISON, "Converting Tissue-Type Plasminogen Activator Into a Zymogen", <i>J. Biol. Chem.</i> (1996) 271:28749-28752.	
		TAKAYAMA ET AL., "Characterization of the Precursor of Prostate Specific Antigen Activation by Trypsin and by Human Glandular Kallikrein", <i>J. Biol. Chem.</i> (1997) 272:21582-21588.	
		WANG ET AL., "Production of Active Recombinant Human Chymase from a Construct Containing the Enterokinase Cleavage Site of Trypsinogen in Place of the Native Propeptide Sequence", <i>Biol. Chem. Hoppe-Seyler</i> (1995) 376:681-684.	
		YAMASHIRO ET AL., "Molecular Cloning of a Novel Trypsin-Like Serine Protease (Neurosin) Preferentially Expressed in Brain", <i>Biochim. Biophys. Acta</i> (1997) 1350:11-14.	
		YOSHIDA ET AL., "Sequence Analysis and Expression of Human Neurosin cDNA and Gene", <i>Gene</i> (1998) 213:9-16.	
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